CLAIMS

What is claimed is:

1. A system comprising:

a first dispatcher having a local dispatch table including data;

at least a second dispatcher coupled with the first dispatcher, the second dispatcher having a local dispatch table including at least a portion of the data; and

a plurality of servers coupled with each of the first dispatcher and the second dispatcher.

2. The system of claim 1, further comprising a router having a port coupled with each of the first dispatcher and the second dispatcher.

3. The system of claim 2, the port of the router exhibiting port trunking.

4. The system of claim 1, the first dispatcher and the second dispatcher exhibiting identical network addresses.

5. A system comprising:

a router having a port;

a first dispatcher coupled with the port, the first dispatcher having a local dispatch table including at least one session entry identifying a client and a selected server;

at least a second dispatcher coupled with the port, the second dispatcher having a local dispatch table including a session entry identifying the client and the selected server;

a network, each of the first dispatcher and the second dispatcher coupled with the network; and

a plurality of servers, each of the plurality of servers coupled with the network.

6. The system of claim 5, the network comprising a system area network.

7. The system of claim 6, the system area network exhibiting an InfiniBand® architecture.

8. The system of claim 5, wherein the router is coupled with one of a Local Area Network, a Wide Area Network, a Metropolitan Area Network, and the Internet.

9. The system of claim 5, the port of the router exhibiting port trunking.

10. The system of claim 5, the first dispatcher and the second dispatcher exhibiting identical network addresses.

11. The system of claim 5, the plurality of servers comprising:
a first server group providing a first application; and
at least a second server group providing a second, different application.

12. The system of claim 11, each of the first server group and the second server group comprising at least one server.

13. A method comprising:
maintaining a local dispatch table in each dispatcher of a plurality of dispatchers, said each dispatcher coupled with a plurality of servers; and
placing at least shared data in the local dispatch table of said each dispatcher.

14. The method of claim 13, further comprising broadcasting a dispatch table update from one dispatcher to all other dispatchers of the plurality of dispatchers.

15. The method of claim 13, the shared data identifying at least one client and a selected server of the plurality of servers.

16. A method comprising:

placing a session entry in a local dispatch table of one dispatcher of a plurality of dispatchers, the session entry identifying a client and a server selected from a plurality of servers coupled with the plurality of dispatchers; and

broadcasting a dispatch table update to all other dispatchers of the plurality of dispatchers, the dispatch update identifying the client and the selected server.

17. The method of claim 16, further comprising placing a session entry in a local dispatch table of each dispatcher of said all other dispatchers, the session entry identifying the client and the selected server.

18. The method of claim 16, further comprising transmitting a packet from said one dispatcher to the selected server.

19. A method comprising:

receiving a packet at one dispatcher of a plurality of dispatchers, the packet including a connection request from a client;

placing a session entry in a local dispatch table of said one dispatcher, the session entry identifying the client and a server selected from a plurality of servers coupled with the plurality of dispatchers; and

broadcasting a dispatch table update to all other dispatchers of the plurality of dispatchers.

20. The method of claim 19, further comprising:
receiving the dispatch table update at each dispatcher of said all other dispatchers; and
placing a session entry in a local dispatch table of said each dispatcher, the session entry identifying the client and the selected server.

21. The method of claim 19, further comprising:
receiving a second packet at another dispatcher of the plurality of dispatchers;
searching the local dispatch table of said another dispatcher to identify the selected server; and
transmitting the second packet to the selected server.

22. The method of claim 21, wherein said another dispatcher and said one dispatcher comprise the same dispatcher of the plurality of dispatchers.

23. The method of claim 21, wherein the second packet includes a termination request from the client, the method further comprising:
removing the session entry from the local dispatch table of said another dispatcher; and
broadcasting another dispatch table update from said another dispatcher to all remaining dispatchers of the plurality of dispatchers, said another dispatch table update indicating the removal of the session entry.

24. The method of claim 23, further comprising removing the session entry from the local dispatch table of each dispatcher of the remaining dispatchers.

25. The method of claim 23, further comprising terminating a session corresponding to the session entry.

26. A method comprising:
receiving a packet at a router coupled with a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;
selecting a dispatcher from the plurality of dispatchers; and
transmitting the packet to the selected dispatcher.

27. The method of claim 26, further comprising arbitrarily selecting the selected dispatcher from the plurality of dispatchers.

28. The method of claim 26, further comprising:
searching a local dispatch table of the selected dispatcher to determine a selected server of the plurality of servers; and
transmitting the packet from the selected dispatcher to the selected server.

29. A method comprising:

receiving a packet at a router having a port coupled with a plurality of communication links, each of the plurality of communication links coupled with one dispatcher of a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;

selecting a communication link from the plurality of communication links; and

transmitting the packet over the selected communication link to a corresponding dispatcher coupled with the selected communication link.

30. The method of claim 29, further comprising arbitrarily selecting the selected communication link from the plurality of communication links.

31. The method of claim 29, further comprising:

searching a local dispatch table of the corresponding dispatcher to determine a selected server of the plurality of servers; and

transmitting the packet from the corresponding dispatcher to the selected server.

32. A method comprising:

receiving a packet at one dispatcher of a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;

searching a local dispatch table of said one dispatcher;

transmitting the packet from said one dispatcher to a server of the plurality of servers if the local dispatch table identifies the server; and

transmitting the packet from said one dispatcher to a locking dispatcher of the plurality of dispatchers if the local dispatch table includes a client lock.

33. The method of claim 32, wherein the local dispatch table includes the client lock, the method further comprising:

selecting a server from the plurality of servers; and

transmitting the packet from the locking dispatcher to the selected server.

34. The method of claim 33, further comprising broadcasting a dispatch table update from the locking dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update identifying the selected server and indicating removal of the client lock.

35. A method comprising:

receiving a first packet at one dispatcher of a plurality of dispatchers, the first packet including a connection request from a client;

creating a client lock on packets received from the client; and

broadcasting a dispatch table update from said one dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update indicating the client lock.

36. The method of claim 35, further comprising:

receiving at least a second packet at another dispatcher of the plurality of dispatchers; and

transmitting the second packet from said another dispatcher to said one dispatcher.

37. The method of claim 36, further comprising:

selecting a server from a plurality of servers coupled with the plurality of dispatchers; and

transmitting the first packet and the second packet to the selected server.

38. The method of claim 37, further comprising broadcasting another dispatch table update from said one dispatcher to said all other dispatchers, said another dispatch table update identifying the selected server and indicating removal of the client lock.

39. A method comprising:

receiving a packet at a router having a port coupled with a plurality of dispatchers, the packet including a connection request from a client;

transmitting the packet from the router to a first dispatcher of the plurality of dispatchers;

selecting a server from a plurality of servers coupled with the plurality of dispatchers;

placing a session entry in a local dispatch table of the first dispatcher, the session entry identifying the client and the selected server;

broadcasting a dispatch table update from the first dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update identifying the client and the selected server; and

transmitting the packet to the selected server.

40. The method of claim 39, further comprising:

selecting a communication link from a plurality of communication links, each of the plurality of communication links coupling one of the plurality of dispatchers with the port of the router; and

transmitting the packet over the selected communication link to the first dispatcher.

41. The method of claim 40, further comprising randomly selecting the communication link from the plurality of communication links.

42. The method of claim 39, further comprising:
determining a load on each of the plurality of servers; and
selecting the server at least partially in response to the load on said each server.

43. The method of claim 39, further comprising:
identifying an application associated with the packet; and
selecting the server at least partially in response to the identified application.

44. The method of claim 43, further comprising:
placing a client lock on the packet;
receiving at least one other packet at another dispatcher of the plurality of dispatchers; and
transmitting said at least one other packet from said another dispatcher to the first dispatcher.

45. The method of claim 39, further comprising replacing in the packet a network address associated with each of the plurality of dispatchers with a network address of the selected server.

46. An article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

maintain a local dispatch table in each dispatcher of a plurality of dispatchers, said each dispatcher coupled with a plurality of servers; and

place at least shared data in the local dispatch table of said each dispatcher.

47. The article of manufacture of claim 46, wherein the instructions, when executed, further cause the machine to broadcast a dispatch table update from one dispatcher to all other dispatchers of the plurality of dispatchers.

48. The article of manufacture of claim 47, the shared data identifying at least one client and a selected server of the plurality of servers.

49. An article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

place a session entry in a local dispatch table of one dispatcher of a plurality of dispatchers, the session entry identifying a client and a server selected from a plurality of servers coupled with the plurality of dispatchers; and

broadcast a dispatch table update to all other dispatchers of the plurality of dispatchers, the dispatch update identifying the client and the selected server.

50. The article of manufacture of claim 49, wherein the instructions, when executed, further cause the machine to create a session entry in a local dispatch table of each dispatcher of said all other dispatchers, the session entry identifying the client and the selected server.

51. The article of manufacture of claim 49, wherein the instructions, when executed, further cause the machine to transmit a packet from said one dispatcher to the selected server.

52. An article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

receive a packet at one dispatcher of a plurality of dispatchers, the packet including a connection request from a client;

place a session entry in a local dispatch table of said one dispatcher, the session entry identifying the client and a server selected from a plurality of servers coupled with the plurality of dispatchers; and

broadcast a dispatch table update to all other dispatchers of the plurality of dispatchers.

53. The article of manufacture of claim 52, wherein the instructions, when executed, further cause the machine to:

receive the dispatch table update at each dispatcher of said all other dispatchers; and

place a session entry in a local dispatch table of said each dispatcher, the session entry identifying the client and the selected server.

54. The article of manufacture of claim 53, wherein the instructions, when executed, further cause the machine to:

receive a second packet at another dispatcher of the plurality of dispatchers;

search the local dispatch table of said another dispatcher to identify the selected server; and

transmit the second packet to the selected server.

55. The article of manufacture of claim 54, wherein said another dispatcher and said one dispatcher comprise the same dispatcher of the plurality of dispatchers.

56. The article of manufacture of claim 53, the second packet including a termination request from the client, wherein the instructions, when executed, further cause the machine to:

remove the session entry from the local dispatch table of said another dispatcher; and

broadcast another dispatch table update from said another dispatcher to all remaining dispatchers of the plurality of dispatchers, said another dispatch table update indicating the removal of the session entry.

57. The article of manufacture of claim 56, wherein the instructions, when executed, further cause the machine to remove the session entry from the local dispatch table of each dispatcher of the remaining dispatchers.

58. The article of manufacture of claim 56, wherein the instructions, when executed, further cause the machine to terminate a session corresponding to the session entry.

59. An article of manufacture comprising:
a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to
receive a packet at a router coupled with a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;
select a dispatcher from the plurality of dispatchers; and
transmit the packet to the selected dispatcher.

60. The article of manufacture of claim 59, wherein the instructions, when executed, further cause the machine to arbitrarily select the selected dispatcher from the plurality of dispatchers.

61. The article of manufacture of claim 59, wherein the instructions, when executed, further cause the machine to:
search a local dispatch table of the selected dispatcher to determine a selected server of the plurality of servers; and
transmit the packet from the selected dispatcher to the selected server.

62. A article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

receive a packet at a router having a port coupled with a plurality of communication links, each of the plurality of communication links coupled with one dispatcher of a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;

select a communication link from the plurality of communication links; and

transmit the packet over the selected communication link to a corresponding dispatcher coupled with the selected communication link.

63. The article of manufacture of claim 62, wherein the instructions, when executed, further cause the machine to arbitrarily select the selected communication link from the plurality of communication links.

64. The article of manufacture of claim 62, wherein the instructions, when executed, further cause the machine to:

search a local dispatch table of the corresponding dispatcher to determine a selected server of the plurality of servers; and

transmit the packet from the corresponding dispatcher to the selected server.

65. A article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

receive a packet at one dispatcher of a plurality of dispatchers, the plurality of dispatchers coupled with a plurality of servers;

search a local dispatch table of said one dispatcher;

transmit the packet from said one dispatcher to a server of the plurality of servers if the local dispatch table identifies the server; and

transmit the packet from said one dispatcher to a locking dispatcher of the plurality of dispatchers if the local dispatch table includes a client lock.

66. The article of manufacture of claim 65, the local dispatch table including the client lock, wherein the instructions, when executed, further cause the machine to:

select a server from the plurality of servers; and

transmit the packet from the locking dispatcher to the selected server.

67. The article of manufacture of claim 66, wherein the instructions, when executed, further cause the machine to broadcast a dispatch table update from the locking dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update identifying the selected server and indicating removal of the client lock.

68. A article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

receive a first packet at one dispatcher of a plurality of dispatchers, the first packet including a connection request from a client;

create a client lock on packets received from the client; and

broadcast a dispatch table update from said one dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update indicating the client lock.

69. The article of manufacture of claim 68, wherein the instructions, when executed, further cause the machine:

receive at least a second packet at another dispatcher of the plurality of dispatchers; and

transmit the second packet from said another dispatcher to said one dispatcher.

70. The article of manufacture of claim 69, wherein the instructions, when executed, further cause the machine to:

select a server from a plurality of servers coupled with the plurality of dispatchers; and

transmit the first packet and the second packet to the selected server.

71. The article of manufacture of claim 70, wherein the instructions, when executed, further cause the machine to broadcast another dispatch table update from said one dispatcher to said all other dispatchers, said another dispatch table update identifying the selected server and indicating removal of the client lock.

72. A article of manufacture comprising:

a machine accessible medium, the machine accessible medium providing instructions that, when executed by a machine, cause the machine to

receive a packet at a router having a port coupled with a plurality of dispatchers, the packet including a connection request from a client;

transmit the packet from the router to a first dispatcher of the plurality of dispatchers;

select a server from a plurality of servers coupled with the plurality of dispatchers;

place a session entry in a local dispatch table of the first dispatcher, the session entry identifying the client and the selected server;

broadcast a dispatch table update from the first dispatcher to all other dispatchers of the plurality of dispatchers, the dispatch table update identifying the client and the selected server; and

transmit the packet to the selected server.

73. The article of manufacture of claim 72, wherein the instructions, when executed, further cause the machine to:

select a communication link from a plurality of communication links, each of the plurality of communication links coupling one of the plurality of dispatchers with the port of the router; and

transmit the packet over the selected communication link to the first dispatcher.

74. The article of manufacture of claim 73, wherein the instructions, when executed, further cause the machine to randomly select the communication link from the plurality of communication links.

75. The article of manufacture of claim 72, wherein the instructions, when executed, further cause the machine to:

determine a load on each of the plurality of servers; and

select the server at least partially in response to the load on said each server.

76. The article of manufacture of claim 72, wherein the instructions, when executed, further cause the machine to:

identify an application associated with the packet; and

select the server at least partially in response to the identified application.

77. The article of manufacture of claim 76, wherein the instructions, when executed, further cause the machine to:

place a lock on the packet;

receive at least one other packet at another dispatcher of the plurality of dispatchers; and

transmit said at least one other packet from said another dispatcher to the first dispatcher.

78. The article of manufacture of claim 72, wherein the instructions, when executed, further cause the machine to replace in the packet a network address associated with each of the plurality of dispatchers with a network address of the selected server.